EUROPA Installation

NOTE: This page describes installation for current code. If you downloaded a release (e.g. EUROPA_2.1.1), see instead this previous version of this page.

Currently, EUROPA is only available as a source distribution and you will have to build it yourself. However, we are transitioning to a binary distribution, and the build instructions result in a distribution form of EUROPA. This page outlines steps needed to get EUROPA built and running on your system.

Supported Platforms

EUROPA is currently supported on Linux, Mac OS, and Solaris. Some users have been able to run EUROPA on Windows using cygwin; this is not officially supported yet but we are planning to add support for it in the near future.

A platform is officially supported if and only if there is an automated build regularly scheduled for it. You can see details of the environments used for the automated builds here.

Software Requirements

To begin with, you will need the following software installed on your system:

- Jam 2.5 - An automated build system *(replacement for* `make`*)*
- Java 1.5 - A platform independent programming language and runtime.
- Doxygen - An automated documentation generator. *(required only to generate API documentation)*

The following software is also required, but is likely already installed on your system:

- Subversion - version control system.
- GCC 3.3+ - GNU Compiler Collection.
- Perl - A general purpose scripting language, used for some utility scripts in PLASMA. *(not strictly required)*
- SWIG 1.3.29+ - Tool that allows us to expose C++ interfaces in Java and other languages. (mac users : if you download it from the swig site, make sure you get swig, not macswig, which is a very old version available from that site)

While not currently officially supported, EUROPA should run on Windows:

- Cygwin - A POSIX environment for Microsoft Windows.
- NOTE: For Windows, do NOT check out PlanWorks (only PLASMA).

Checkout

If you haven't already, checkout the two EUROPA packages (PlanWorks contains the PlanWorks and PSUI visualization tools, while PLASMA contains the core EUROPA software) as described here.

Environment Configuration

The following environment variables are needed to build and run EUROPA (shown here added to `~/.bashrc`, assuming that PLASMA was checked out in the /home/tsmith/svn directory):

```
export PLASMA_HOME=/home/tsmith/svn/PLASMA                          # PLASMA_HOME is only used to ease the
export ANT_HOME=$PLASMA_HOME/ext/ant                                # EUROPA includes a version of Ant with
export PLANWORKS_HOME=/home/tsmith/svn/PlanWorks                    # wherever you checked out PlanWorks

# On Cygwin, the following two paths should be defined with Windows style paths without spaces.
export JAVA_HOME=/home/tsmith/programs/jdk1.6.0_03                  # the directory where you installed Jav
export EUROPA_HOME=/home/tsmith/svn/PLASMA/dist/europa              # where the results of the build are pl

export LD_LIBRARY_PATH=$EUROPA_HOME/lib:./build/lib:.               # DYLD_LIBRARY_PATH on a Mac
export DYLD_BIND_AT_LAUNCH=YES                                      # Only needed on Mac OS X
```

You may also need to add the 'jam' and 'ant' executables to your path:

```
export PATH=$PATH:$ANT_HOME/bin:/home/tsmith/programs/jam
```

Finally, for reasons we can't fathom, you may need to add the following if you want to use PlanWorks:

```
export OSTYPE=$OSTYPE
```

Build

To build EUROPA, simply run (Note that this will take a while):

```
% cd <path-to-root-PLASMA-directory>
% ant
```

This creates debug and optimized versions of EUROPA, and moves the results into the $EUROPA_HOME directory.

For more build configuration details and options, see the Build Configuration page (currently out of date!).

If desired, Doxygen API documentation can be run by following the directions here.

Troubleshooting

To see if you have the necessary software requirements, run (note that you must be in the 'bin' directory):

```
% cd <path-to-root-PLASMA-directory>/bin
% checkreqs
```

If you have any trouble, please Contact the EUROPA team.